## I claim:

1. A method of performing a financial transaction involving at least: (a) a provider of goods or services, (b) a purchaser of said goods or services, and (c) at least one further entity, the purchaser using a credit card having a credit card identifier associated therewith to effect a purchase of said goods or services, the method including:

performing at least one transaction between the provider and the purchaser; associating at least one identifier different from the credit card identifier with said transaction;

communicating the transaction identifier but not the credit card identifier from the purchaser to the further entity over the Internet;

associating the transaction identifier to the purchaser's credit card identifier, whereby the credit card issuer charges the purchaser's credit card based at least in part on the associated credit card identifier.

- 2. A method as in claim 1 further including transmitting the purchaser's credit card identifier over a private connection.
- 3. A method as in claim 1 wherein the communicating step includes transmitting pieces of information at different times to different locations.
- 4. A method of making charges for goods and/or services against the account of a payment card having an associated account number, including paying a provider of goods and/or services, without supplying the account number to the provider of said goods and services.
- 5. A method of providing transactions while providing uniqueness for each transaction, including relying on transactional identifying system generated by

combining providers' identification numbers with their internal invoice numbers for each transaction.

6. A method of conducting payment transactions between consumer and merchant comprising:

generating a transaction identifier associated with and identifying a transaction between the consumer and the merchant;

communicating said transaction identifier in lieu of the consumer's credit card account identifier;

authenticating said communicated transaction identifier and those who transmit it;

associating the transaction identifier with the consumer's credit card account; and

effecting payment from the consumer to the merchant through use of said consumer's credit card account.

- 7. The method of claim 6 wherein the consumer communicates the transaction identifier.
- 8. The method of claim 6 wherein said merchant generates said transaction identifier and communicates it to a third party transaction facilitator.
- 9. The method of claim 8 wherein said third party transaction facilitator comprises a clearinghouse.
- 10. The method of claim 8 wherein said third party transaction facilitator comprises the issuer of said consumer's credit card account.
- 11. The method of claim 6 wherein said communicating step comprises communicating said transaction identifier over the Internet.
- 12. The method of claim 6 wherein said authenticating step is based on a consumer passcode.

- 13. The method of claim 6 wherein said authenticating step is based on a digital signature.
- 14. The method of claim 6 wherein said associating step is performed based on a database lookup.
- 15. The method of claim 6 further including the steps of:
  combining the transaction identifier and consumer's personal identifier,
  subjecting the combined transaction identifier and consumer's personal
  identifier to an undisclosed mathematical procedure, and

transmitting the result of said procedure,

wherein the authenticating step is based at least in part on the transmitted result.

16. A system for conducting secure payment transactions between consumer and merchant comprising:

equipment at the merchant that generates a transaction identifier associated with and identifying a transaction between the consumer and the merchant and communicates said transaction identifier to a transaction facilitator in lieu of the consumer's credit card account identifier;

equipment at the transaction facilitator that authenticates said communicated transaction identifier and associates the transaction identifier with the consumer's credit card account; and

payment fulfillment equipment that effects payment from the consumer to the merchant through use of said consumer's credit card account.

- 17. The system of claim 16 wherein said merchant uses a web server to generate said transaction identifier and communicate it to the transaction facilitator.
- 18. The system of claim 16 wherein said transaction facilitator includes a web server, a firewall, and an offline computer coupled to the web server through the firewall.

- 19. The system of claim 16 wherein said merchant uses an electronic cash register to generate said transaction identifier.
- 20. The system of claim 16 wherein said transaction facilitator includes a secure database that maps transaction identifiers and consumer passcodes into credit card account authorizations.
- 21. The system of claim 16 wherein said authenticating equipment is responsive to digital signatures and certificates.